

CANADIAN MYRIOPODS COLLECTED IN 1882-1883 BY J. B. TYRRELL, WITH ADDITIONAL RECORDS.

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Among material sent to me for identification from the Canadian Geological Survey is a small collection made by J. B. Tyrrell in 1882-1883 which is of much interest in containing a new *Scytonotus* from British Columbia, a new *Conotyla* from Alberta and a new *Parajulus*. In addition to the forms collected by Tyrrell, some other species collected by F. Johansen in 1917 and 1918, one taken by J. A. Salter and one by R. Wells are also here listed.

CHILOPODA.

1. *Geophilus rubens* (Say.)

One specimen taken at Ottawa June 3, 1882, by Tyrrell.

2. *Lithobius forficatus* (Linné.)

Specimens taken at Ottawa in 1917 and 1918 and on St. Joseph's Id., Ontario, Sept. 3, 1918, by F. Johansen.

3. *Sonibius politus* (McNeil.)

One specimen taken at Ottawa, June 3, 1882, by Tyrrell.

DIPLOFODA.

4. *Polydesmus serratus* (Say.)

One male taken by R. Wells in 1883 on Gaspé Peninsula, Quebec, "interior," and others at Ottawa and Chelsea, summer of 1918, by F. Johansen.

5. *Scytonotus columbianus*, sp. nov.

At once separable from *S. bergrothi* Chamberlin, known from Bremerton, Washington, in its obviously smaller size, which approaches more nearly that of *S. granulatus* Say. As in the latter species the colour is horn brown with a tendency toward reddish. The female may be distinguished in having the keels of the eighth and ninth segments of normal size or very nearly so, not absent or nearly so. The male differs in the details of the gonopods, the anterior prong, e. g., in lateral view appearing more slender and finely tapered and curving much farther beyond the end of the posterior branch,



Fig. 16.—*Scytonotus columbianus*, sp. nov. Gonopod of male, right side, ectal view.

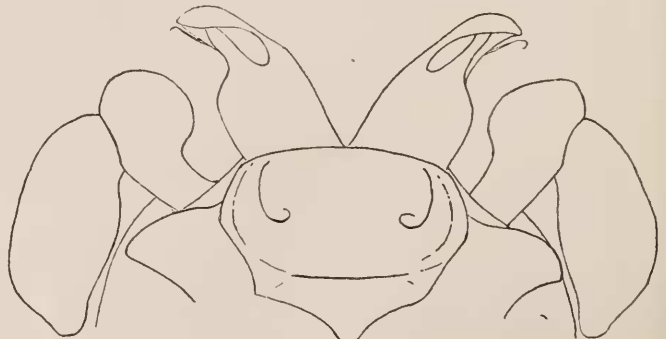


Fig. 17.—*Conotyla albertana*, sp. nov. Gonopods of male, anterior view.

which also differs in details (see fig. 16). Correlated with the normal develop-

ment of the keels of the eighth and ninth segments of the female, processes from the penult segment of legs thirteen to seventeen, etc., as occurring in *granulatus*, are absent or obsolete in the male of the present species.

Length of male type near 10 mm. The female is larger and more robust.

Locality.—British Columbia: "Columbia Valley." Male type taken by Tyrrell Sept. 26, 1883. The two female paratypes were taken by Tyrrell Sept. 1, 1883, the locality label reading simply "Swamp, tobacco plain," probably in or near the Columbia Valley.

6. *Conotyla albertana*, sp. nov.

Light gray brown to light brown of reddish cast, especially above. A black stripe along each laterodorsal side across keels and median dorsal longitudinal black line. Anal tergite dark, valves dusky. Legs light brown or fulvous. Antennae all missing. Ocelli in the male type in a subtriangular patch, twenty-two in five series: thus, 7, 6, 5, 3, 1. Ocelli of a female paratype twenty in four series: thus, 7, 6, 4, 3. Second legs of female with second joint strongly thickened distad, protruding on dorsal side distally in a conspicuous rounded lobe. In the male the fourth joint of the third, fourth and fifth legs with a short cylindrical, distally truncate, lobe beneath near distal end. Sixth legs lacking lobes. Legs followed seventh segment also lacking lobes. Anal scutum truncate, with the usual setae. Anal valves posteriorly angulate, mesally margined. Gonopods of male shown in Fig. 17.

Locality.—Alberta, Bow River, Sept. 28, 1833, Tyrrell.

Resembles *C. atrolineata* Bollman, the types of which came from Glacier, B.C., but distinct in the form the gonopods and in the secondary modifications of the legs.

7. *Julus caeruleocinctus* (Wood.)

One specimen taken at Ottawa in summer of 1918 by Johansen.

8. *Julus fallax*, (Meinert.)

One male of this European species taken by Johansen at Ottawa in Apr., 1917, and several males and females at the same place in the summer of 1918.

9. *Parajulus canadensis* (Newport.)

One female taken by Johansen 20 May, 1917, at Meach Lake, Ottawa.

10. *Parajulus venustus* (Wood.)

Two females taken on St. Joseph's Id., Ontario, by Johansen, Sept. 3, 1918.

11. *Parajulus perditus*, sp. nov.

The type, a female, is an exceptionally dark form. Each ordinary segment has a very narrow fulvous stripe or line along the segmental suture with a blackish annulus bordering it in front and behind, the border regions of the somite lighter, more grayish. Dorsal region on anterior segments with more numerous small lighter areolations visible under lens as frequently. In the anterior region the body is lighter beneath and on the sides, more or less reddish. The paratype from Wigwam River is lighter, being reddish gray or in part fulvous gray on the sides and beneath throughout the length, with small, in part confluent, lighter areas included in the dark of prozonite above. In both specimens the collum is marked across anterior border by a black band widening to middle where it continues caudad as a median longitudinal black line; a

black line from anterior end of the median line runs on each side obliquely caudoectad; remaining part of collum covered by a dense network of black evident under lens. Vertex of head covered with similar black network; a solid black area between eyes and antenna with pale spot at base of each antenna as usual. Anal segment blackish. Legs light reddish brown. Antennæ blackish.

Vertigial sulcus strongly marked, joining a deep arcuate transverse sulcus running between the eyes.

Collum margined below and part way up anterior edge as usual. Lower end on each side well rounded. Above lower end on each side typically three longitudinal striæ of which the uppermost extends entirely across plate to the margining sulcus and the others nearly as far. Second tergite extending below level of collum, its infero-anterior angle produced below level of the posterior; less broadly and less decidedly produced than in *P. venustus* and especially than in *P. hewitti*, two species which it resembles.

Segmental suture strongly impressed; widely curving opposite the pore, which is widely removed from it. The metazonite on each ordinary segment longitudinally striate beneath and up the side to a little below level of the pore, the more ventral striæ crossing to the prozonite, but the prozonite otherwise nonstriate. The surface in general densely marked with minute shallow punctæ and short lines as in *hewitti*, *venustus*, etc.

The anal tergite is produced beyond the anal valves as in *hewitti* and *venustus*; but, unlike those species, the produced part in side view is seen to bend moderately but distinctly upward, instead of being straight or slightly depressed. The tip is not rounded as in *hewitti*, being decidedly angular as viewed from above, and is broader than in *venustus*. Valves margined as usual.

Number of segments 48-52.

Length about 33 mm.; width 2.5 mm.

Localities.—Waterton Lake. Type taken Aug. 24, 1883. A second female was taken July 25, 1883, on the Wigwam River. Tyrrell coll.

12. *Spirobolus marginatus* (Say.)

On specimen taken at St. Nicholas, Quebec, by J. A. Salter, and one at Renfrew, Ont., by Johansen.

ENTOMOLOGICAL BRANCH—DIVISION OF FOREST INSECTS

Bark-beetle control operations are nearly completed in the Coldwater Valley, B.C., and are now being carried out in the Spious Valley. In addition to the logging operations by which the infested timber is salvaged, hundreds of infested trees, on the mountain sides and in isolated positions, have been felled and burned so as to kill the broods of beetles in the bark. The slash from all this work will be burned during June. Last week Mr. Hopping gave an open air lecture to the Dominion forest rangers at the Spious Creek camp, explaining to them, on the ground, helpful details regarding the infestation.

—Entomological Branch News Letter